

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 2.00

Revision Date: December 7, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Acetaldehyde

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Acetaldehyde

Synonyms: Acetic aldehyde, Ethyl aldehyde

CAS#: 75-07-0

SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Pungent and intense fruity odor.

Possible human carcinogen (IARC-2B).

Moderately toxic by ingestion, inhalation, and skin absorption. Severely irritating to skin and eyes.

Avoid all body contact.

Class IA flammable liquid.

FLINN AT-A-GLANCE

Health-2

Flammability-3

Reactivity-2

Exposure-2

Storage-3

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class IA flammable liquid.

Flash point 0 °C Flammable limits: LEL: 4% UEL: 60% Autoignition Temperature: 175 °C

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

H-2

F-4

R-2

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and ventilate area. Contain spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #3. Store with hydrocarbons, esters, and aldehydes.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.

Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: PEL 200 ppm (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Pungent and intense fruity odor.
Solubility: Miscible with water and alcohol.
Formula: CH₃CHO
Formula weight: 44.1

Boiling point: 21 °C
Melting point: -123.5 °C
Specific gravity: 0.7791
Vapor density: 1.52
Vapor pressure: 740 mm

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids and bases, strong oxidizers, alcohols, ammonia, and any source of ignition.
Prolong contact with air may cause formation of peroxides.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Lachrymator, severe eye irritant.
Chronic effects: Pulmonary edema, possible carcinogen, teratogen, and mutagen.
Target organs: Liver, kidneys, lungs, blood, and nervous system.

ORL-RAT LD₅₀: 661 mg/kg
IHL-RAT LC₅₀: 37 g/m³/30m
SKN-RBT LD₅₀: 3540 mg/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding.
Flinn Suggested Disposal Method #2 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Acetaldehyde
Hazard class: 3, Flammable liquid
UN number: UN1089
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-836-8). RCRA code U001

SECTION 16 — OTHER INFORMATION

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**